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10/585,438

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Giacomo Armenio

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EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,438	<b>Applicant(s)</b> ARMENIO ET AL.	
	<b>Examiner</b> LEONARD J. WEINSTEIN	<b>Art Unit</b> 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to the amendment of November 2, 2010. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.
2. The examiner acknowledges the amendments to claims 1-4 and notes that claims 5-15 have been introduced.

#### ***Claim Objections***

3. Claim 7 is objected to because of the following informalities: the limitation "a difference in pressure of oil the first chamber and the second chamber" should be amended to recite --- a difference in pressure of oil in the first chamber and in the second chamber ---. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 1, and by dependency claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 1 recites the limitation "the control chamber" in line 13. There is insufficient antecedent basis for this limitation in the claim. As best understood by the examiner the limitations will be considered to be --- the first control chamber --- as introduced in lines 7-8.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-11 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hardy US 2,716,946.

Hardy teaches all the limitations as claimed for a pumping system including:

**[claim 1]** a pump 10 and a user device 47 connected to said pump 10 by a delivery conduit (one of elements 23 and 24) pressure control means (26, 29, 40, 44, 45, and 69) for setting said pump 10 to a balanced configuration to supply an oil flow demanded by said user device 47 wherein said pressure control means (26, 29, 40, 44, 45, and 69) comprises hydraulic dissipating means 26 for imparting to the oil in a first control chamber 39 forming part of said pump 10, a pressure lower than a control pressure, a first channel (72, 73, 74; col. 5 ll. 11-26) connecting the first control chamber 39 to an inlet 19 and means (26, 32, 33, 34, 35, 37a; col. 4 ll. 47-55) for connecting the control chamber 39 to the inlet 19 when the first channel (72, 73, 74; col. 5 ll. 11-26) is closed (channels defined by 72, 73, and 74 are independent of the passage formed by 32, 33, 34, 35 and 37a; one can be open while the other is closed);

**[claim 2]** wherein a member 69 of said pump comprises means 68 for selectively closing said first channel (72, 73, 74);

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**[claim 3]** wherein said first channel (72, 73, 74) comprises opening/closing means 69 controlled selectively by an operating parameter (temperature, col. 5 ll. 11-26);

**[claim 4]** wherein said operating parameter (temperature, col. 5 ll. 11-26) is the temperature of the oil pumped by said pump 10;

**[claim 5]** wherein the means (26, 32, 33, 34, 35, 37a; col. 4 ll. 47-55) for connecting the control chamber 39 to the inlet 19 when the first channel (72, 73, 74) is closed comprises a valve 25 in a second channel (bore accommodating element 26; “26-accommodating bore”) connecting the first control chamber 39 to the inlet 19 (col. 4 ll. 47-55);

**[claim 6]** wherein the valve 25 is controlled by a pressure in a second control chamber (26-accommodating bore; col. 4 ll. 26-55).

Hardy teaches all the limitations as claimed for a pumping system including:

**[claim 7]** a user device 47 connected to the pump 10 by a delivery conduit (one of elements 23 or 24) a first chamber 39, a first projection 44 between the first chamber 39 and the pump 10, a second chamber (26-accommodating bore) connected to the delivery conduit (24 of elements 23 and 24; it is also noted that the bore communicate with element 22 which communicates with element 23) through a dissipation means 26 for imparting a pressure to the oil in the second chamber (26-accommodating bore) that is lower than a pressure of oil in the delivery conduit (23 of elements 23 and 24) wherein a difference in pressure of oil the first chamber 39 and the second chamber (26-accommodating bore) moves the projection 44 to set the pump to a balanced configuration to supply an oil flow demanded by the user device 47, and a first channel

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(elements 35 and 37a) connecting the second chamber (26 accommodate bore) to an inlet 19;

**[claim 8]** a means 25 for selectively closing the first channel (35, 37a)

**[claim 9]** wherein the means 25 for selectively closing the first channel (35, 37a) comprises a second projection 29 connected to the pump 10;

**[claim 10]** wherein the means 25 for selectively closing the first channel (35, 37a) includes a valve 26 in the first channel (35, 37a);

**[claim 11]** wherein the means 25 for selectively closing the first channel (35, 37a) is controlled selectively by an operating parameter (pressure/flow rate – col. 4 ll. 26-55);

**[claim 13]** a valve 25 connected between the second chamber (26-accommodating bore) and the inlet 19 for regulating oil pressure in the second chamber (26-accommodating bore) when the first channel (35, 37a) is closed;

**[claim 14]** wherein the valve 25 is controlled by oil pressure in a second chamber (26 accommodating bore; col. 4 ll. 26-55);

**[claim 15]** wherein the pump 10 comprises a variable delivery vane pump (col. 1 ll. 60-61) and the first projection 45 is connected to a ring 14 in the pump 10.

In the alternative Hardy teaches the limitations for a pumping system including:

**[claim 7]** a user device 47 connected to the pump 10 by a delivery conduit 22 (via elements 23 and 75) a first chamber 67, a first projection 68 between the first chamber 67 and the pump 10, a second chamber 39 connected to the delivery conduit 22 through a dissipation means 36 for imparting a pressure to the oil in the second chamber 39 that is lower than a pressure of oil in the delivery conduit 22 wherein a

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difference in pressure of oil the first chamber 67 and the second chamber 39 moves the projection 68 to set the pump 10 to a balanced configuration to supply an oil flow demanded by the user device 47, and a first channel (72, 73, 47) connecting the second chamber 39 to an inlet 19;

**[claim 8]** a means 69 for selectively closing the first channel (72, 73, 74);

**[claim 11]** wherein the means 69 for selectively closing the first channel (72, 73, 74) is controlled selectively by an operating parameter (temperature as applied to element 68; col. 5 ll. 14-18);

**[claim 12]** wherein the operating parameter (temperature as applied to element 68; col. 5 ll. 14-18) is the temperature of the oil pumped by said pump 10.

### ***Response to Arguments***

9. Applicant's arguments filed November 2, 2010 have been fully considered but they are not persuasive. With respect to Hardy the applicant argues Hardy does not disclose a means for connecting the control chamber to and an inlet when a first channel is closed. The examiner notes that the control chamber 39 of Hardy connects to the inlet defined by chamber 19 by two independent series of passages and spool valves. The passage defined by elements 72, 73 and 75 can be open when the passage formed by the communication of elements 37a and 35 with elements 32 and 34 (and therefore element 29) via element 33, is closed.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/  
Supervisory Patent Examiner, Art  
Unit 3746

/Leonard J Weinstein/  
Examiner, Art Unit 3746